

TOWN OF DAVIE  
DEVELOPMENT SERVICES DEPARTMENT  
PLANNING AND ZONING DIVISION  
PLANNING REPORT

April 29, 1999

**SUBJECT:** Variance V 3-7-99

**APPLICANT:** Architectural Aluminum Design, Inc., petitioner / Fred Brandau, owner

**ADDRESS/LOCATION:** 11500 SW 37 Court / Generally located within the Majestic Groves Community

**LAND USE PLAN/ZONING:** Residential (1 du/ac) / R-1

**REQUEST:** **From** Section 12-33(A)(6)(a) which requires a minimum side setback of 25 feet for screen enclosures in the R-1 district.  
**To:** Reduce the required side setback from 25 feet to 15 feet

**From:** Section 12-33(A)(4) which limits the height of accessory structures to a height no greater than the height of the principle structure.  
**To:** Increase the height of an accessory structure from 19 feet to 35 feet.

**From:** Section 12-33(A)(2) which limits the height of accessory structures in the R-1 district to 12 feet.  
**To:** Increase the height of an accessory structure from 12 feet to 35 feet.

**EXHIBITS TO BE INCLUDED:** Variance application, subject site map, planning report, and aerial.

**ANALYSIS:** The subject site is 1.1 acres in size and is located on the south side of SW 58 Court approximately 150 feet east of SW 70 Avenue. The property is bound on the north and west by residential properties of a similar nature zoned R-1, nursery use zoned AG to the east, and the Town's open space park to the south.

Where applicable, the review of a variance request should include consideration of the criteria noted in Section 12-309 of the Land Development Code which is attached hereto and made part hereof.

Comprehensive Plan Policy 17-7 provides that land development regulations shall establish setbacks or separation regulations to enhance living and working environments. Setback requirements address this policy and are designed to maintain the character associated with each of the various zoning districts and to ensure that there is adequate separation between permitted uses.

This variance request to reduce the side setback requirements and increase the height of an accessory structure is associated with the installation of an 9,700 square foot screen enclosure with a geodesic dome design which encloses the pool, spa, deck, and cabana. The dome has a 100' diameter, 35' height, 25' setback to the rear (south) property line, 15' requested setback to the east side property line, and approximate 33' setback to the west side property line. The applicant has indicated the enclosure is a medical necessity as the owner of the property has a medical condition relating to allergic reactions to insect bites.

Section 12-309(B)(1)(b) of the Town Code requires consideration as to whether or not the granting of the variance is necessary for a reasonable use of the land or building and that the variance as requested is the minimum variance that will accomplish that purpose. Staff acknowledges that a screen enclosure is medically necessary for use by the owner, however the lot size and configuration is more than adequate for development of a large screen enclosed patio within the limits of the code. The requested variance is not necessary for a reasonable use of the land and is not the minimum variance that will accomplish that purpose.

**RECOMMENDATION:** The Planning and Zoning Division recommends **DENIAL** of the requested variance to reduce the required side setback from 25 feet to 15 feet and to increase the height of an accessory structure to 35 feet.

**PLANNING AND ZONING BOARD RECOMMENDATION:** Motion to recommend **DENIAL** (5-0), April 28, 1999.

EXISTING ZONING: *R1*  
CODE SECTION:

PROPOSED ZONING:  
CODE SECTION:

LAND USE DESIGNATION: *Residential*

FOLIO NUMBER 0024000041

TOWN OF DAVIE USE ONLY	
PETITION NO.	<i>V3-7-99</i>
FEE.	<i>\$400-</i>
RECEIPT NO.	<i>7490</i>

**RECEIVED**  
MAR-24 1999

TOWN OF DAVIE  
VARIANCE APPLICATION

(NOTE: INFORMATION MUST BE TYPED AND NOTARIZED)  
Make Checks payable to TOWN OF DAVIE

TOWN OF DAVIE  
PLANNING & ZONING DEPARTMENT

DATE FILED:

PHONE: (954) 772-4182

PETITIONER: Architectural Aluminum Design, Inc.

MAILING ADDRESS: 861 N.E. 48th Street, Oakland Park, FL 33334

RELATIONSHIP TO PROPERTY: Contractor, & Temp. Power of Attorney

OWNER: Frederick C. Brandau

MAILING ADDRESS: 11500 SW 37th Court, Davie, FL 33330

ADDRESS OF PROPERTY: 11500 SW 37th Court, Davie, FL 33330

LEGAL DESCRIPTION: (Certified Sealed Boundary Survey to include statement of amount of acreage involved MUST be submitted with application):

See Attached - Raised Survey (Original copy)

ACREAGE: 1.11 Acres More or Less (as stated on survey)

REQUEST: See Attached

REASON FOR REQUEST: (attach additional sheet as necessary)

See Attached

\*\*\* PETITIONER MUST BE PRESENT IN ORDER FOR ACTION TO BE TAKEN \*\*\*

OFFICE USE ONLY

APPROVED AS TO FORM: *JMC*

PUBLICATION DATE:

MEETING DATE: PLANNING AND ZONING BOARD: *4/28/99*

TOWN COUNCIL: *5/19/99*

NOTICES SENT: \_\_\_\_\_ REPLIES: \_\_\_\_\_ FOR: \_\_\_\_\_ AGAINST: \_\_\_\_\_

UNDELIVERABLE: \_\_\_\_\_

Frederick C. Brandau

Architectural Aluminum Design, Inc.

OWNER'S NAME(S)

OWNER'S SIGNATURE (ALL OWNERS MUST SIGN)

11500 SW 37th Court  
ADDRESS

Davie, FL 33330  
CITY, STATE, ZIP

(954) 566-0037  
PHONE

PETITIONER'S NAME

PETITIONER'S SIGNATURE

861 NE 48th Street  
ADDRESS

Oakland Park, FL 33334  
CITY, STATE, ZIP

(954) 772-4182  
PHONE

The foregoing instrument was acknowledged before me  
this 2<sup>nd</sup> day of MARCH, 1999, by  
FRED BRANDAU who is personally  
known to me or who has produced

as identification and who did take an oath.

NOTARY PUBLIC:

Sign: Wanda I. Tirado

Print: Wanda I. Tirado

My Commission Expires:



WANDA I. TIRADO  
COMMISSION # CC 698042  
EXPIRES NOV 20, 2001  
BONDED THRU  
ATLANTIC BONDING CO., INC.

The foregoing instrument was acknowledged before me  
this 3 day of March, 1999, by  
Dorothy M. Patterson who is personally  
known to me or who has produced Driver's License

as identification and who did take an oath.

NOTARY PUBLIC:

Sign: Kim De Simone

Print: Kim De Simone

My Commission Expires:



KIM DE SIMONE  
Notary Public - State of Florida  
My Commission Expires Mar 23, 2002  
Commission # CC 727169

OFFICE USE ONLY

**FREDERICK C. BRANDAU**

11500 SW 37 Ct.  
Davie, Florida 33330

February 8, 1999

**Temporary Power of Attorney**

**TO WHOM IT MAY CONCERN:**

I am the owner of the property located at 11500 SW 37 Ct., Davie, FL 33330, and I hereby grant a Temporary Power of Attorney to:

**Architectural Aluminium Design Inc.  
Ms. Dorothy Butterson  
Mr. Charles Butterson  
Mr. Tim Chron**

**All and Singular**

That they or any one of them has full power to represent me as the property owner in dealings with the City of Davie, the City of Davie Town Council, and the Majestic Grove Home Association for the sole purpose of obtaining permits and variances for the proposed Geodesic Dome screen enclosure on the property. This Power of Attorney extends to and includes all aspects of the screen enclosure including, but not limited to, "footers," exterior electrical plumbing, sprinklers and landscape.

This Temporary Power of Attorney shall remain in effect until revoked in writing by me and the City of Davie, the City of Davie Town Council, and the Majestic Grove Home Association may rely upon this Power of Attorney until actual notice of revocation is received in writing from me by certified mail, return receipt requested.

IN WITNESS WHEREOF, I have hereunto signed my name this 8th day of February, 1999.

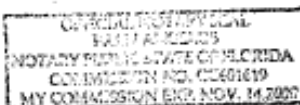
  
Frederick C. Brandau

State of Florida  
County of Broward

Sworn to and subscribed before me by Frederick C. Brandau, to me personally known or who provided the following identification: Florida Driver's License.

  
Notary Public

My Commission Expires:



**RECEIVED**  
MAR 24 1999  
TOWN OF DAVIE  
PLANNING & ZONING DEPARTMENT

Architectural Aluminum & Design, Inc.  
861 N.E. 48<sup>th</sup> Street  
Ft. Lauderdale, FL 33334  
Phone # (954) 772-4182 Fax# (954) 772-4183

March 17, 1999

City of Davie  
Variance Department



Ref: 11500 SW 37<sup>th</sup> Court

**Request:** We are requesting that the setbacks for the southeast side of the property to be allowed at 15' instead of 25' as required by code. Secondly, we are requesting a height allowance with a minimum of 35', instead of 12' as required by code, so that we may add a secondary structure which will be a Geodesic Dome screen enclosure for the pool, spa, deck & cabana area. All of which are permitted structures on the above-mentioned property. (A geodesic dome is a circular shape broken up into small triangular shaped elements).

**Reason for request:** The first request for the setback on the southeast corner of the property to be at 15' is due to an existing structure which has been permitted on 12/90, (See attached), and was existing on the property when purchased. A deck with a cabana, (See attached for engineering & architectural drawings). Permit # 90-3666 as you will see is noted as (Wood Deck, Tiki w/ Roof).

As to the second request for the height variance, this is because of the 100' diameter, which is needed to enclose this complete area. With the diameter being nearly 100', the height will need to be at a minimum of 37' to keep it's structural integrity.

We feel this is a realistic request. As you will see from all the facts to follow, the only practical way to enclose this area is with a Geodesic Dome. This enclosure will be supported by a concrete footer and screened walls (see

attached letters and pictures of elevations). Please review the other documents (attached) with pictures and literature that further support the structural strength & integrity of the enclosure.

Enclosed is a letter from American Ingenuity, which emphasizes why the enclosure needs to be of this size, both in the diameter and the height. The letter also supports the height limitations we are requesting. The letter from American Ingenuity shows that going any lower in height, would weaken the structure.

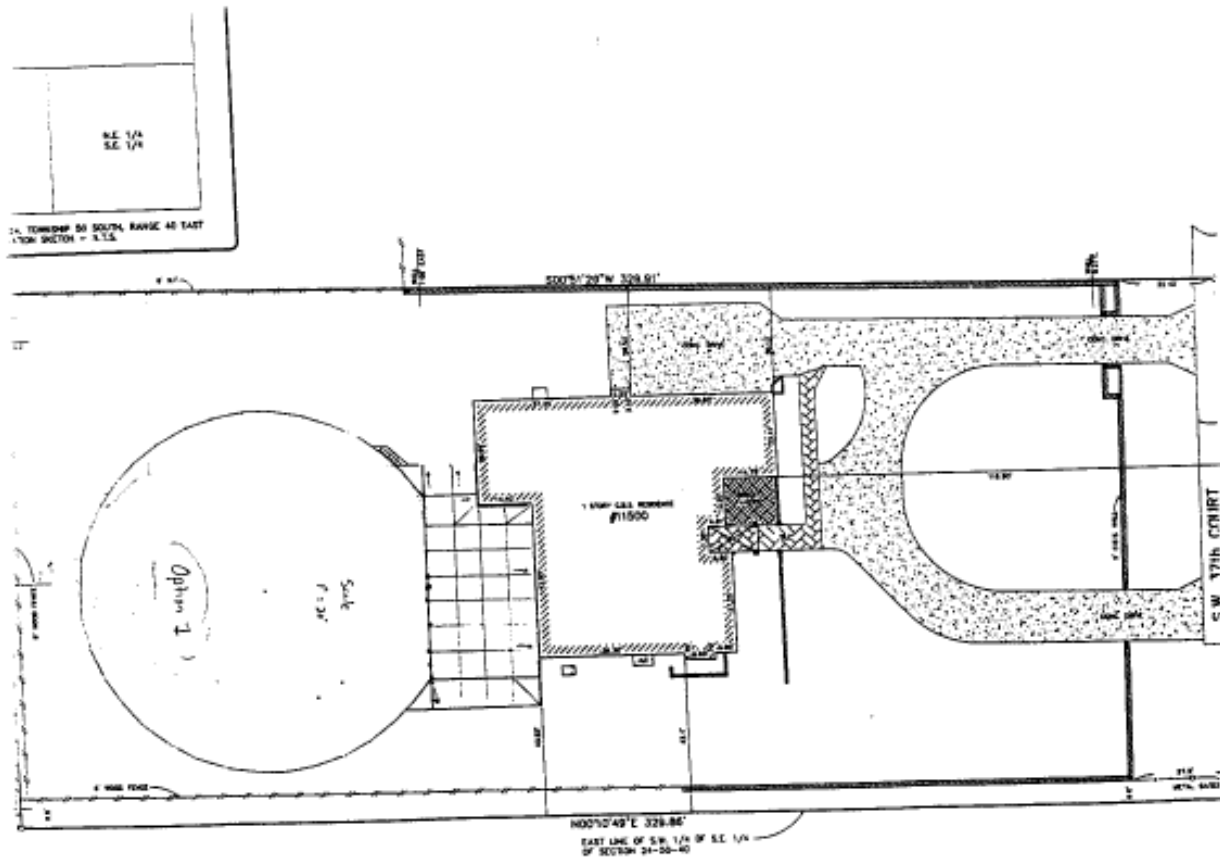
The main reason for requesting this variance is due to medical hardships, which the owner of this property suffers from. It is at the strong urging of the owner's physician (copy attached) that we are pursuing the execution of this enclosure.

**Conclusion:** We have taken the time and effort to involve top engineers in their field to present a win win situation for both the Town of Davie and the owner at 11500 S.W. 37<sup>th</sup> Court. The owner does have a specific need for health reasons. The design is pleasing to the eye, yet functional to address all physical and legal concerns. This type structure is engineered to withstand much higher loads than the typical "box or square" structure, as the engineer of record has documented. There is also an extra added value, inasmuch as the Dome will have added value to the property.

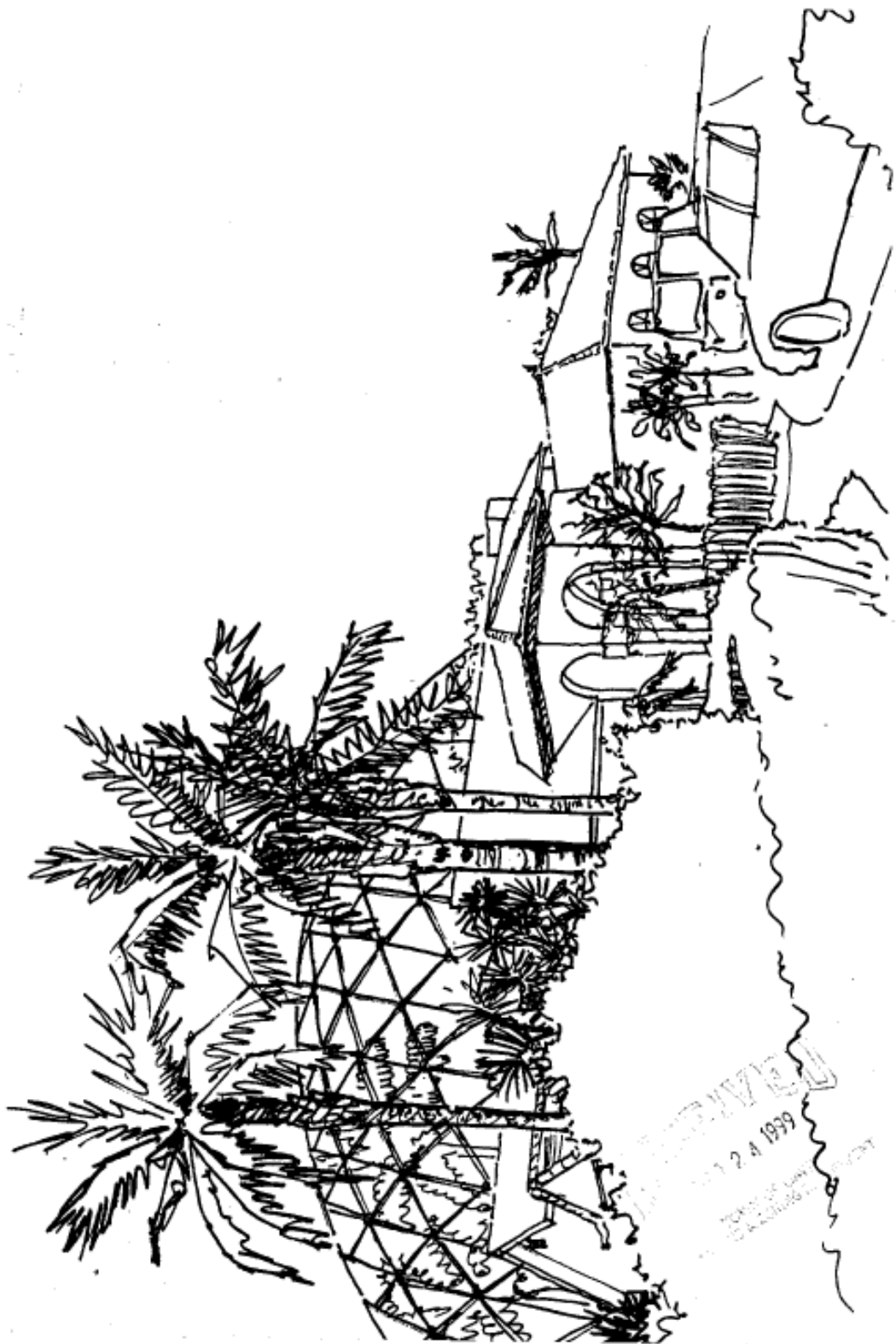
Sincerely,



Dorothy Bufterson  
Architectural Aluminum Design, Inc.









February 16, 1999

Re: Screen Enclosure at 11500 S.W. 37th Court, Davey

To whom it may concern;

The screen enclosure for 11500 S.W. 37th Court will need to span distances near 100 ft. and enclose buildings with a height of more than 15 ft. presents a difficult and distinct design requirement. The only practical way to span that distance and enclose the patio, pool and deck is to utilize a screen enclosure configured in a spherical dome shape.

A geodesic dome with triangular shaped elements provides the rigidity and strength that will be required to withstand the wind loading for that location. To provide the inherent strength and structural integrity that is needed for this dome, the height at the apex must be maintained at 35 -40% of the diameter. A greater height would incur greater wind loading and a lower height would sacrifice the inherent strength of the dome shape. Also a lower height at the apex would not provide the clearance for the enclosed structures.

Michael Busick  
Design Engineer

RECEIVED  
MAR 24 1999  
TOWN OF BAYE  
PLANNING & ZONING DEPARTMENT

# St. Elizabeth's Medical Center of Boston

736 Cambridge Street Boston, Massachusetts 02135-2997 617/789-2545  
FAX 617/562-7756

## TUFTS LUNG STATION

Bartolome R. Celli, M.D., Chief  
Gerard B. Hayes, M.D.  
Sadamu Ishikawa, M.D.  
Lawrence A. Kenney, M.D.  
Edwin M. Trayner, Jr., M.D.  
Kenneth F. MacDonnell, M.D.  
Chairman, Dept. of Medicine

Boston, February 24 th 1999

To Whom it may concern:

This letter is to certify that Mr Fred Brandau has had symptoms of allergic reactions to insect bites, including skin rash and worsening dyspnea. Mr Brandau also carry a diagnosis of Obstructive Sleep Apnea Syndrome which may get worse by any allergic reaction that compromise his upper respiratory airways. Therefore, I recommend Mr Brandau to minimize exposure to any agent (ie insect bites, fumes, food) by different means including but not limited to house and bed screens to prevent insect bites.

Sincerely yours



Victor M. Pinto-Plata, MD

Pulmonary-Critical Care Medicine  
St Elizabeth's Medical Center  
Boston, MA.

 A Caritas Christi Health Care System Member  
A University Medical Center of Tufts University School of Medicine

RECEIVED  
MAR 24 1999  
TOWN OF BAYVE  
PLANNING & ZONING DEPARTMENT



## Geodesic Domes

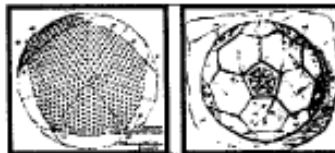
by J. Baldwin

Click the yellow arrows above to see other inventions.

Domes have been around for centuries. What makes geodesic domes different?

Efficiency. A sphere is already efficient: it encloses the most volume with the least surface. Thus, any dome that is a portion of a sphere has the least surface through which to lose heat or intercept potentially damaging winds.

A geodesic dome uses a pattern of self-bracing triangles in a pattern that gives maximum structural advantage, thus theoretically using the least material possible. (A "geodesic" line on a sphere is the shortest distance between any two points.)



Click the pictures above to examine patent drawings.

Local loads are distributed throughout the geodesic dome, utilizing the entire structure. Geodesic domes get stronger, lighter (qt movie, 2.6mb, no sound), and cheaper per unit of volume as their size increases--just the opposite of conventional building.



Bucky cooled critics by erecting enormous geodesic domes of many different designs, very quickly--sometimes in mere hours instead of months or years. Serving atop mountains, sheltering Arctic radar installations, and even covering the South Pole, they have proved to be the strongest structures ever devised. Earthquakes cannot damage them unless the ground opens up and swallows the foundation (or it is undermined, as the South Pole dome has been.) There has been no report of hurricane damage of a properly designed geodesic dome; indeed, they are demonstrations of more-with-less, or "ephemeralization," as Bucky liked to say. The best ones are proportionally thinner than a chicken egg shell is to the egg.

**More volume is sheltered by Bucky's domes than by the work of any other architect.**

<http://www.pbs.org/wnet/bucky/dome.html>

2/15/99

This open-air geodesic dome, the headquarters for ASM International, was completed in 1960. It stands 103 feet high and 250 feet in diameter. They also have a [web site](#).

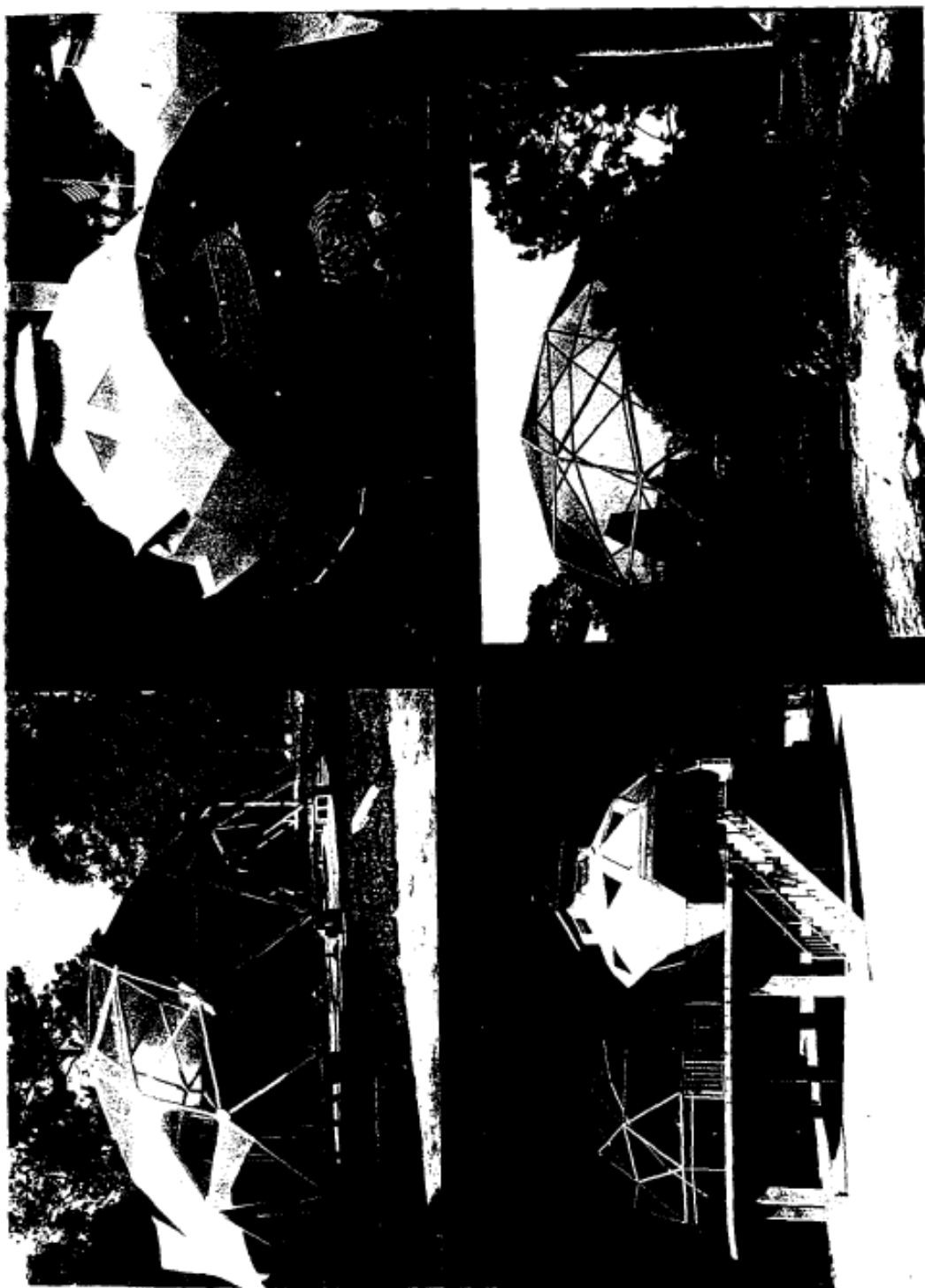


[ [Back to Contents](#) | [Back to PBS Online](#) ]

<http://www.pbs.org/wnet/bucky/dome.html>

RECEIVED  
MAR 24 1999  
TOWN OF BAY  
PLANNING & ZONING DEPARTMENT

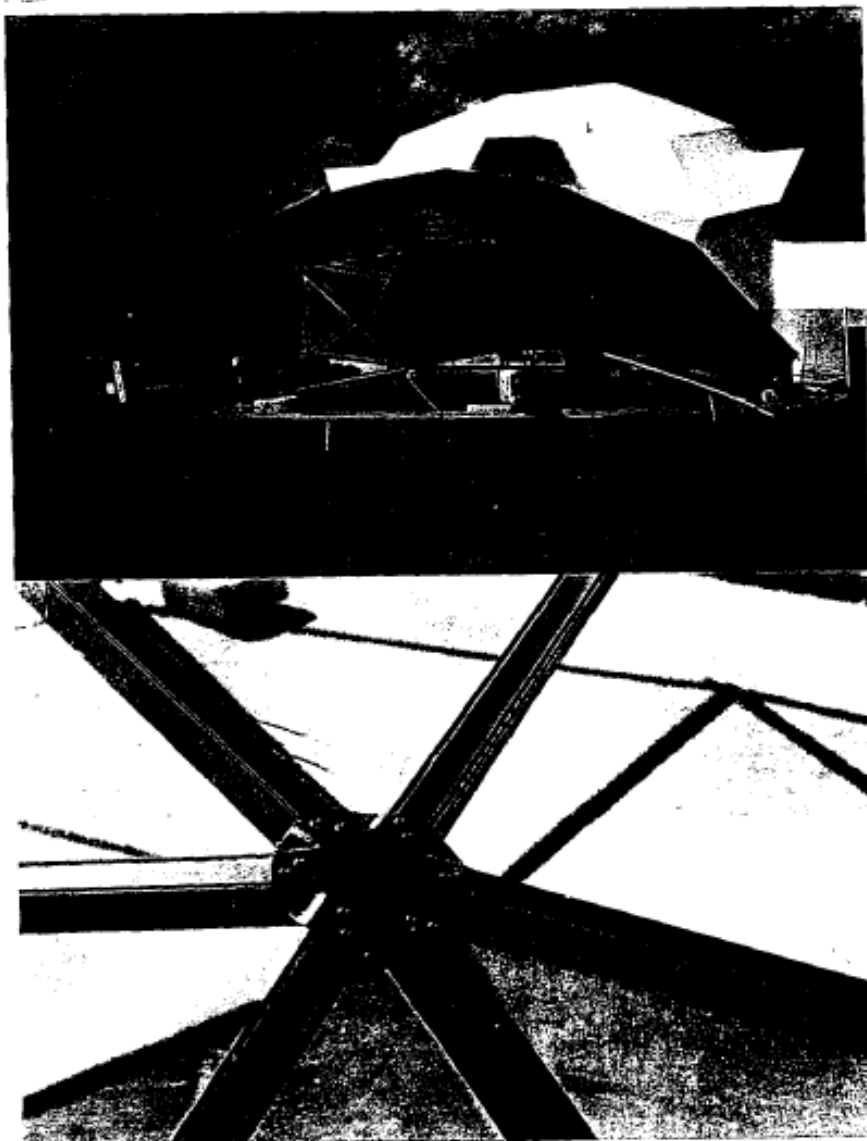
2/15/99



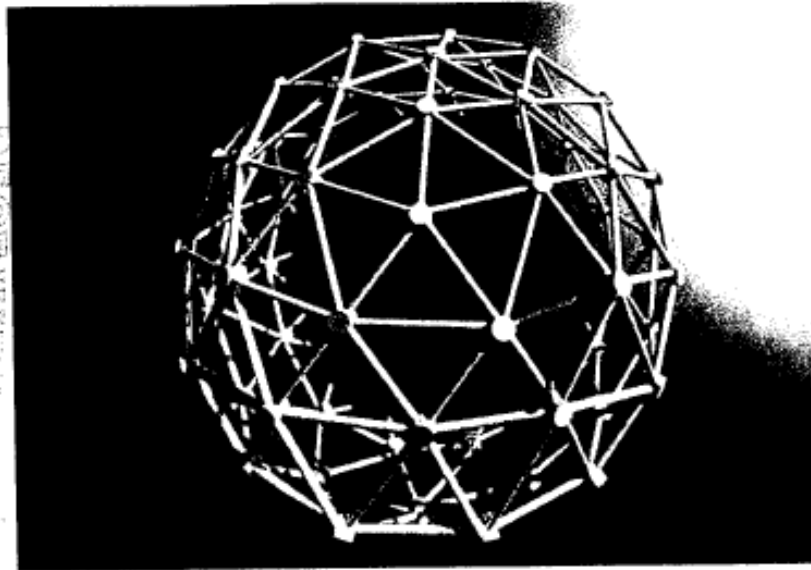
ARMY OF BRAZIL  
COMANDO EM CHEFE

MAR 24 1999

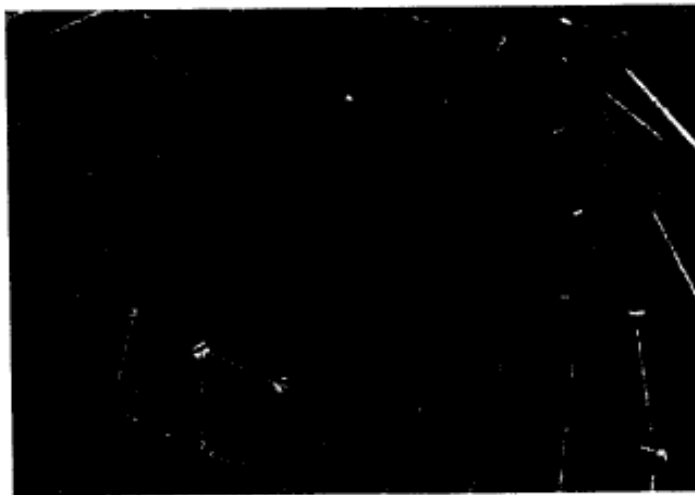
RECEIVED



RECEIVED  
MAR 24 1999  
TOHIO OF BENT  
OF THE BENT

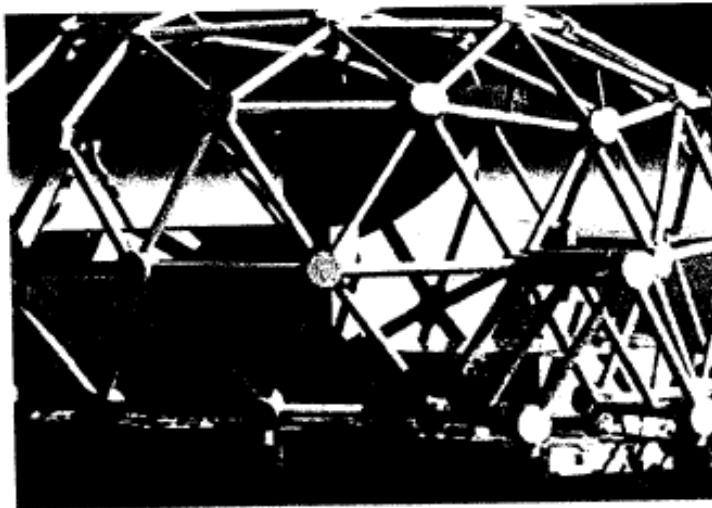


## ICOSAHEDRON



<http://www.alienconnection.com/domepage.htm>

2/15/99



We are still under construction here, more to come soon. Please stop back.

**BACK HOME**

<http://www.alienconnection.com/domepage.htm>

RECEIVED  
MAY 24 1999  
TOWN OF DAVIE  
PLANNING & ZONING DEPARTMENT

2/15/99

